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CATEGORY:

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FORM PTO-1390 (Modified) (REV 10-95)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER <b>196823US</b>	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR <b>09/623599</b>	
INTERNATIONAL APPLICATION NO. <b>PCT/SE99/00269</b>		INTERNATIONAL FILING DATE <b>25 February 1999</b>		PRIORITY DATE CLAIMED <b>03 March 1998</b>	
TITLE OF INVENTION <b>PROCEDURE IN MOBILE TELEPHONE SYSTEM TO TRANSMIT POSITION SPECIFICATIONS</b>					
APPLICANT(S) FOR DO/EO/US <b>Robert FRANK, et al</b>					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).</li> <li>4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c) (2)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)).</li> <li>7. <input checked="" type="checkbox"/> A copy of the International Search Report (PCT/ISA/210).</li> <li>8. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>9. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>10. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).</li> <li>11. <input checked="" type="checkbox"/> A copy of the International Preliminary Examination Report (PCT/IPEA/409).</li> <li>12. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).</li> </ol> <p><b>Items 13 to 18 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>13. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>14. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>15. <input type="checkbox"/> A <b>FIRST</b> preliminary amendment. A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</li> <li>16. <input type="checkbox"/> A substitute specification.</li> <li>17. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>18. <input type="checkbox"/> Certificate of Mailing by Express Mail</li> <li>19. <input checked="" type="checkbox"/> Other items or information:</li> </ol>					
<b>Notice of Priority</b> <b>Request For Consideration of Documents Cited in International Search Report</b>					

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR <b>09/623599</b> )	INTERNATIONAL APPLICATION NO. <b>PCT/SE99/00269</b>	ATTORNEY'S DOCKET NUMBER <b>196823US</b>
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20. The following fees are submitted:

**BASIC NATIONAL FEE ( 37 CFR 1.492 (a) (1) - (5)) :**

- |  |                 |
|--|-----------------|
| <input type="checkbox"/> Search Report has been prepared by the EPO or JPO .....   | <b>\$840.00</b> |
| <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) .....  | <b>\$670.00</b> |
| <input type="checkbox"/> No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) .....   | <b>\$760.00</b> |
| <input checked="" type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... | <b>\$970.00</b> |
| <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) .....         | <b>\$96.00</b>  |

**ENTER APPROPRIATE BASIC FEE AMOUNT =****CALCULATIONS PTO USE ONLY**

Surcharge of **\$130.00** for furnishing the oath or declaration later than ☐ 20 ☒ 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	- 20 =	0	x \$18.00	<b>\$0.00</b>	
Independent claims	- 3 =	0	x \$78.00	<b>\$0.00</b>	
Multiple Dependent Claims (check if applicable).			<input type="checkbox"/>	<b>\$0.00</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$1,100.00</b>	

Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) (check if applicable). ☐

**SUBTOTAL = \$1,100.00**

Processing fee of **\$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (f)). ☐

**TOTAL NATIONAL FEE = \$1,100.00**

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). ☐

**TOTAL FEES ENCLOSED = \$1,100.00**

Amount to be refunded	\$
charged	\$

- ☒ A check in the amount of **\$1,100.00** to cover the above fees is enclosed.
- ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- ☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **15-0030** A duplicate copy of this sheet is enclosed.

**NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.**

SEND ALL CORRESPONDENCE TO:

<b>Surinder Sachar</b> <b>Registration No. 34,423</b>
--

*Surinder Sachar*  
SIGNATURE

**Gregory J. Maier**  
NAME

**25,599**  
REGISTRATION NUMBER

9-5-00  
DATE

196823US

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
ROBERT FRANK ET AL : ATTN: APPLICATION DIVISION  
SERIAL NO: 09/623,599 :  
FILED: 05 SEPTEMBER 2000 :  
FOR: PROCEDURE IN A MOBILE :  
TELEPHONE SYSTEM TO  
TRANSMIT POSITION  
SPECIFICATIONS

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Prior to a first examination on the merits, please amend the above-identified  
application as follows:

IN THE CLAIMS

Claim 3, lines 1-2, replace "any of the previous patent claims" with --claim 1--.

Claim 4, lines 1-2, replace "any of the previous patent claims" with --claim 1--.

Claim 5, lines 1-2, replace "any of the previous patent claims" with --claim 1--.

Claim 6, lines 1-2, replace "any of the previous patent claims" with --claim 1--.

## REMARKS

Favorable consideration of this application, as presently amended, is respectfully requested.

The present Preliminary Amendment is submitted to place the above-identified application in more proper format under United States practice. By the present Preliminary Amendment the claims have been amended to no longer recite any improper multiple dependent claims.

The present application is believed to be in condition for a full and thorough examination on the merits. An early and favorable consideration of the present application is hereby respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Attorney of Record  
Registration No. 25,599  
Surinder Sachar  
Registration No. 34,423



**22850**

(703) 413-3000  
Fax No.: (703) 413-2220  
SNS/la  
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PROCEDURE IN A MOBILE TELEPHONE SYSTEM TO TRANSMIT POSITION SPECIFICATIONS

5 **Field of the invention**

The present invention relates to a procedure to transmit a position specification, especially at emergency call from a mobile telephone in a mobile telecommunications system to an emergency centre. The position of the mobile  
10 is found out by the system and is transmitted to a mobile station for storing. When an emergency call is made from the mobile station, a position specification is transmitted automatically by a separate message to the emergency centre. In the emergency centre the message with the  
15 position specification is routed to the same terminal that receives the telephone call. This is possible owing to that both the telephone call and the message with the position specification includes information about the number of the mobile station.

20

**Prior art**

At emergency calls today, the calling party has to specify his/her position himself/herself. The calling party often can be confused due to the emergency, and also in  
25 many cases knows little about the locality.

In the present invention a position specification is transmitted automatically to the emergency centre without the calling party doing nothing but keying the alarm number. This of course is a great help for the staff at the  
30 emergency centre who quickly can localize the calling distressed person and for instance pick up the right map.

**Summary of the invention**

Thus the present invention provides a procedure to  
35 transmit position specifications in mobile telephone systems which have base stations and mobile stations.

According to the invention, a position specification is transmitted to a mobile station which stores the position specification. When a certain telephone call is made from the mobile to a centre which has a receiving terminal, this will trigger off that the position specification is collected and transmitted in a separate message to the centre.

The invention is specified in detail in enclosed patent claims.

#### **Detailed description of preferred embodiments**

At call to an emergency centre it is important to quickly get the position where the accident or the crime has occurred. Often a user can find it difficult to tell where he/she is due to poor knowledge of the locality, or due to confusion.

To know the position might help the staff at the emergency centre to, together with questioning the calling party, find out exactly from where the call is coming.

With mobile telephony the rescue service has considerably better prospects of being on the spot in time; by position the task would be even simpler.

According to a preferred embodiment of the invention, a position specification is transmitted on cell level via CBS (Cell Broadcast Service), and is routed down to an application on the SIM-card (Subscriber Identity Module). When the emergency number "112" is keyed, the position is at the same time transmitted via short text message, SMS (Short Message Service) to the emergency centre. In the emergency centre one can via A-number analysis route the SMS-message to the same person (terminal) as has received the call. On basis of the position, the operator (or the equipment automatically) can pick up a map over the locality in question. Often a cell is large, but the help can in spite of that gain some valuable minute by giving

the operator at the emergency centre a fairly restricted area to search.

As alternative to SMS, also USSD (Unstructured Supplementary Services Data) or UUS (User-to-User Signalling) can be used to transfer the position information to the emergency centre. USSD has similar qualities as SMS. USS, on the other hand, is transmitted directly in the "SET UP"-message in the ISUP-signalling. This means that when the emergency operator answers, the position specification already is there. The advantage of UUS consequently is that the message reaches the operator quicker and is more reliable. It, however, implies that the emergency centre is equipped with telephone equipment with ISDN-technology (Integrated Services Digital Network).

The technology which makes the function possible is based on the following:

CBS: A CB-message with cell position specification can be routed directly to the SIM-card.

SIM Toolkit and SMS: One of the functions supported by the application platform SIM Toolkit is call control, which i.a. has the quality that all telephone numbers which are keyed have to pass the SIM-card. SIM Toolkit allows that fairly advanced applications are implemented on the card itself. In this case, the SIM Toolkit application shall react to the string "112" by transmitting an SMS with the position specification, and forward "112" to the telephone, which establishes a call to the emergency centre.

Consequently the procedure according to the invention includes the steps that:

- the cell position is delivered to the mobile via a CBS-message which is routed to the SIM-card. This means that all base stations have to transmit position specification. This, however, can be used for many services, so the message is not only used for emergency calls.



- SIM Toolkit's function "Call control", where all keyed numbers pass the SIM-card is used to start an application when "112" is keyed.

- SIM Toolkit's function "Proactive SIM", which i.a. allows that the SIM-card can transmit an SMS-message, is used to transfer the received position to the emergency centre.

- the SMS-message with position is, by means of A-number analysis, routed to the operator who has received the emergency call. USSD or UUS also can serve as carrier of the position data.

The invention consequently improves the efficiency at emergency calls, because the position is transmitted to the emergency centre at the same time as the emergency call is going on.

28 -03- 2000

PATENT CLAIMS

1. Procedure to transmit position specification in mobile telephone system including base stations and mobile stations, c h a r a c t e r i z e d in the steps:

- that a position specification is transmitted to a mobile station which stores the position specification;
- that a specific telephone call is made from the mobile to a centre which has a receiving terminal;
- that the specific call triggers off that the position specification is collected and is transmitted in a separate message to the centre;
- that the position is transmitted via short text message (SMS) to the centre, which by A-number-analyse identify where to route the SMS-message and verbal contact is connected to the same operator in the centre, and the operator identify the area from which the mobile calls.

2. Procedure as claimed in patent claim 1, c h a r a c t e r i z e d in that the telephone call and the message both include information about the subscriber number of the mobile station, so that the message is routed to the same receiving terminal.

3. Procedure as claimed in any of the previous patent claims, c h a r a c t e r i z e d in that the position specification is transmitted out on cell level via a general (cell broadcast; CB) message.

4. Procedure as claimed in any of the previous patent claims, c h a r a c t e r i z e d in that the position specification is stored in an application on the mobile station's subscriber card (SIM).

5. Procedure as claimed in any of the previous patent claims, c h a r a c t e r i z e d in that the message is of the type short text message (SMS) or USSD (Unstructured Supplementary Services Data) or UUS (User-to-User Signalling).

6. Procedure as claimed in any of the previous patent claims, c h a r a c t e r i z e d in that the telephone call is an emergency call, and the centre is an emergency centre.

# Declaration, Power Of Attorney and Petition

Page 1 of 3

WE (I) the undersigned inventor(s), hereby declare(s) that:

My residence, post office address and citizenship are as stated below next to my name,

We (I) believe that we are (I am) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

PROCEDURE IN A MOBILE TELEPHONE SYSTEM TO TRANSMIT POSITION

SPECIFICATIONS

the specification of which

☐ is attached hereto.

☒ was filed on 05 September 2000 as  
Application Serial No. 09/623,599  
and amended on \_\_\_\_\_.

☒ was filed as PCT international application  
Number PCT/SE99/00269  
on 25 February 1999,  
and was amended under PCT Article 19  
on \_\_\_\_\_ (if applicable).

We (I) hereby state that we (I) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We (I) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

We (I) hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s)

Application No.	Country	Day/Month/Year	Priority Claimed
9800652-1	SWEDEN	03 March 1998	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

We (I) hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

We (I) hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status (pending, patented, abandoned)
PCT/SE99/00269	25 February 1999	_____
_____	_____	_____
_____	_____	_____

And we (I) hereby appoint: Norman F. Oblon, Registration Number 24,618; Marvin J. Spivak, Registration Number 24,913; C. Irvin McClelland, Registration Number 21,124; Gregory J. Maier, Registration Number 25,599; Arthur I. Neustadt, Registration Number 24,854; Richard D. Kelly, Registration Number 27,757; James D. Hamilton, Registration Number 28,421; Eckhard H. Kuesters, Registration Number 28,870; Robert T. Pous, Registration Number 29,099; Charles L. Gholz, Registration Number 26,395; Vincent J. Sunderdick, Registration Number 29,004; William E. Beaumont, Registration Number 30,996; Steven B. Kelber, Registration Number 30,073; Robert F. Gnuse, Registration Number 27,295; Jean-Paul Lavalleye, Registration Number 31,451; Stephen G. Baxter, Registration Number 32,884; Martin M. Zoltick, Registration Number 35,745; Robert W. Hahl, Registration Number 33,893; Richard L. Treanor, Registration Number 36,379; Steven P. Weihrouch, Registration Number 32,829; John T. Goolkasian, Registration Number 26,142; Marc R. Labgold, Registration Number 34,651; William J. Healey, Registration Number 36,160; Richard L. Chinn, Registration Number 34,305; Steven E. Lipman, Registration Number 30,011; Carl E. Schlier, Registration Number 34,426; James J. Kulbaski, Registration Number 34,648; Catherine B. Richardson, Registration Number 39,007; Richard A. Neifeld, Registration Number 35,299; J. Derek Mason, Registration Number 35,270; and Surinder Sachar 34,423; our (my) attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent Office connected therewith; and we (I) hereby request that all correspondence regarding this application be sent to the firm of OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C., whose Post Office Address is: Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202.

We (I) declare that all statements made herein of our (my) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Robert FRANK  
\_\_\_\_\_  
NAME OF FIRST SOLE INVENTOR  
  
Robert Frank  
\_\_\_\_\_  
Signature of Inventor

Residence: Götgatan 75A, 5tr, S-116 62  
Stockholm, SWEDEN SEX  
\_\_\_\_\_  
Citizen of: SWEDEN  
Post Office Address: same as above  
\_\_\_\_\_  
\_\_\_\_\_

11 Dec. 2000  
\_\_\_\_\_  
Date

Mats Olof WINROTH

NAME OF SECOND JOINT INVENTOR

2<sup>nd</sup> Mats Olof Winroth

Signature of Inventor

18 December 2000

Date

NAME OF THIRD JOINT INVENTOR

Signature of Inventor

Date

NAME OF FOURTH JOINT INVENTOR

Signature of Inventor

Date

NAME OF FIFTH JOINT INVENTOR

Signature of Inventor

Date

Residence: Franz-Marc-Weg 3, D-85586

~~Poing~~ GERMANY

DEX

Citizen of: SWEDEN

Post Office Address: same as above

Residence:

Citizen of:

Post Office Address:

Residence:

Citizen of:

Post Office Address:

Residence:

Citizen of:

Post Office Address: